

SEQUENCE LISTING

<110> Kent D. Taylor (Inventor)
Maren T. Scheuner (Inventor)
Jerome I. Rotter (Inventor)
Huiying Yang (Inventor)

<120> Genetic Test to Determine
Non-responsiveness to Statin Drug Treatment

<130> 18810-82302

<140> Unassigned

<141> 2001-07-03

<150> 09/347,114

<151> 1999-07-02

<160> 110

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 24

<212> DNA

<213> Homo sapiens

<400> 1

gcattctgcct tcagctagac attg

24

<210> 2

<211> 24

<212> DNA

<213> Homo sapiens

<400> 2

tcttccagaa gggtagatt ccaa

24

<210> 3

<211> 21

<212> DNA

<213> Homo sapiens

<400> 3

ggaaaacata agccctgaat c

21

<210> 4

<211> 21

<212> DNA

<213> Homo sapiens

<400> 4

0989879 "070304
T0E0/0" 6486860

0969679.070304
T0E070"6/296969

gaaaacataa gccctgaatc g

21

<210> 5
<211> 21
<212> DNA
<213> Homo sapiens

<400> 5
aacataagcc ctgaatcgct c

21

<210> 6
<211> 21
<212> DNA
<213> Homo sapiens

<400> 6
cctgaatcgc tcacagttat t

21

<210> 7
<211> 21
<212> DNA
<213> Homo sapiens

<400> 7
ctgaatcgct cacagttatt c

21

<210> 8
<211> 21
<212> DNA
<213> Homo sapiens

<400> 8
aatcgctcac agttattcag t

21

<210> 9
<211> 21
<212> DNA
<213> Homo sapiens

<400> 9
ttggcactgt ttcttgtaag t

21

<210> 10
<211> 21
<212> DNA
<213> Homo sapiens

<400> 10
cactatagtt tgcaaaatcc c

21

<210> 11
<211> 24
<212> DNA
<213> Homo sapiens

0989879-070301

<400> 11
caaacctccg agatgctacc tgga

24

<210> 12
<211> 24
<212> DNA
<213> Homo sapiens

<400> 12
agatgctacc tggataatca aaga

24

<210> 13
<211> 24
<212> DNA
<213> Homo sapiens

<400> 13
gatgctacct ggataatcaa agat

24

<210> 14
<211> 24
<212> DNA
<213> Homo sapiens

<400> 14
cttccagaag ggtgagattc caag

24

<210> 15
<211> 24
<212> DNA
<213> Homo sapiens

<400> 15
ccagaagggt gagattccaa gata

24

<210> 16
<211> 24
<212> DNA
<213> Homo sapiens

<400> 16
cagaagggtg agattccaag ataa

24

<210> 17
<211> 24
<212> DNA
<213> Homo sapiens

<400> 17
cccacccatg tgtaccata aaat

24

<210> 18
<211> 24
<212> DNA
<213> Homo sapiens

09898779-070304
T0E070"62286860

<400> 18
ccacccatgt gtacccataa aatg

24

<210> 19
<211> 24
<212> DNA
<213> Homo sapiens

<400> 19
cccattgtga cccataaaat gaat

24

<210> 20
<211> 24
<212> DNA
<213> Homo sapiens

<400> 20
gtacccataa aatgaattac acag

24

<210> 21
<211> 24
<212> DNA
<213> Homo sapiens

<400> 21
cccataaaat gaattacaca gaga

24

<210> 22
<211> 24
<212> DNA
<213> Homo sapiens

<400> 22
atgaattaca cagagatcgc tata

24

<210> 23
<211> 24
<212> DNA
<213> Homo sapiens

<400> 23
acacagagat cgctatagga ttta

24

<210> 24
<211> 24
<212> DNA
<213> Homo sapiens

<400> 24
ttataacatt tccatcccca agat

24

<210> 25
<211> 24
<212> DNA

0988779-070304
FOE020" 6/285850

<213> Homo sapiens

<400> 25
catctgcctt cagctagaca ttgc

24

<210> 26
<211> 24
<212> DNA
<213> Homo sapiens

<400> 26
ctgcattaag gaattagggc atct

24

<210> 27
<211> 24
<212> DNA
<213> Homo sapiens

<400> 27
agatcaactc tgccatctct tagc

24

<210> 28
<211> 24
<212> DNA
<213> Homo sapiens

<400> 28
tcttatgtta ctgggctttc acca

24

<210> 29
<211> 24
<212> DNA
<213> Homo sapiens

<400> 29
agcctagagc agtcttatgt tact

24

<210> 30
<211> 24
<212> DNA
<213> Homo sapiens

<400> 30
cagcctagag cagtcttatg ttac

24

<210> 31
<211> 24
<212> DNA
<213> Homo sapiens

<400> 31
acagcctaga gcagtcttat gtta

24

<210> 32
<211> 24

093979-070301

<212> DNA
<213> Homo sapiens

<400> 32
agacagccta gagcagtctt atgt 24

<210> 33
<211> 26
<212> DNA
<213> Homo sapiens

<400> 33
cctgggtaac tgagcgagac tgtgtc 26

<210> 34
<211> 25
<212> DNA
<213> Homo sapiens

<400> 34
atctgaccaa ggatagtggg atata 25

<210> 35
<211> 26
<212> DNA
<213> Homo sapiens

<400> 35
ctttataaca tttccatccc caagat 26

<210> 36
<211> 26
<212> DNA
<213> Homo sapiens

<400> 36
tgtaccata aaatgaatta cacaga 26

<210> 37
<211> 26
<212> DNA
<213> Homo sapiens

<400> 37
accataaaaa tgaattacac agagat 26

<210> 38
<211> 26
<212> DNA
<213> Homo sapiens

<400> 38
aaaatgaatt acacagagat cgctat 26

<210> 39

09898779-070301

<211> 26
<212> DNA
<213> Homo sapiens

<400> 39
ttacacagag atcgctatag gattta

26

<210> 40
<211> 25
<212> DNA
<213> Homo sapiens

<400> 40
cagcctagag cagtcttatg ttact

25

<210> 41
<211> 25
<212> DNA
<213> Homo sapiens

<400> 41
acagcctaga gcagtcttat gttac

25

<210> 42
<211> 25
<212> DNA
<213> Homo sapiens

<400> 42
gacagcctag agcagtctta tgtta

25

<210> 43
<211> 28
<212> DNA
<213> Homo sapiens

<400> 43
ataaaatgaa ttacacagag atcgctat

28

<210> 44
<211> 26
<212> DNA
<213> Homo sapiens

<400> 44
aagattcttt ataacatttc catccc

26

<210> 45
<211> 28
<212> DNA
<213> Homo sapiens

<400> 45
aattacacag agatcgctat aggattta

28

09898779.070304

<210> 46
<211> 26
<212> DNA
<213> Homo sapiens

<400> 46
acagcctaga gcagtcttat gttact

26

<210> 47
<211> 19
<212> DNA
<213> Homo sapiens

<400> 47
cccacccatg tgtacccat

19

<210> 48
<211> 18
<212> DNA
<213> Homo sapiens

<400> 48
ccacccatgt gtacccat

18

<210> 49
<211> 21
<212> DNA
<213> Homo sapiens

<400> 49
cacccatgtg taccataaa a

21

<210> 50
<211> 20
<212> DNA
<213> Homo sapiens

<400> 50
acccatgtgt acccataaaa

20

<210> 51
<211> 22
<212> DNA
<213> Homo sapiens

<400> 51
ggctttcacc aagagatgat aa

22

<210> 52
<211> 22
<212> DNA
<213> Homo sapiens

<400> 52
gggctttcac caagagatga ta

22

09898779.070301

<210> 53
<211> 22
<212> DNA
<213> Homo sapiens

<400> 53
tgaattacac agagatcgct at

22

<210> 54
<211> 22
<212> DNA
<213> Homo sapiens

<400> 54
acagagatcg ctataggatt ta

22

<210> 55
<211> 17
<212> DNA
<213> Homo sapiens

<400> 55
gttactgggc tttcacc

17

<210> 56
<211> 20
<212> DNA
<213> Homo sapiens

<400> 56
cttatgttac tgggctttca

20

<210> 57
<211> 20
<212> DNA
<213> Homo sapiens

<400> 57
tcttatgtta ctgggctttc

20

<210> 58
<211> 19
<212> DNA
<213> Homo sapiens

<400> 58
ccacccatgt gtacccata

19

<210> 59
<211> 18
<212> DNA
<213> Homo sapiens

<400> 59

cacccatgtg tacccata

18

<210> 60
<211> 18
<212> DNA
<213> Homo sapiens

<400> 60
acccatgtgt acccataa

18

<210> 61
<211> 18
<212> DNA
<213> Homo sapiens

<400> 61
cccatgtgta cccataaa

18

<210> 62
<211> 20
<212> DNA
<213> Homo sapiens

<400> 62
caactctgcc atctcttagc

20

<210> 63
<211> 20
<212> DNA
<213> Homo sapiens

<400> 63
tcaactctgc catctcttag

20

<210> 64
<211> 20
<212> DNA
<213> Homo sapiens

<400> 64
atcaactctg ccatctctta

20

<210> 65
<211> 18
<212> DNA
<213> Homo sapiens

<400> 65
gaaaacataa gccctgaa

18

<210> 66
<211> 19
<212> DNA
<213> Homo sapiens

<400> 66
aaaacataag ccctgaatc

19

<210> 67
<211> 17
<212> DNA
<213> Homo sapiens

<400> 67
acataagccc tgaatcg

17

<210> 68
<211> 17
<212> DNA
<213> Homo sapiens

<400> 68
ctgaatcgct cacagtt

17

<210> 69
<211> 19
<212> DNA
<213> Homo sapiens

<400> 69
tgaatcgctc acagttatt

19

<210> 70
<211> 19
<212> DNA
<213> Homo sapiens

<400> 70
atcgctcaca gttattcag

19

<210> 71
<211> 19
<212> DNA
<213> Homo sapiens

<400> 71
tcgctcacag ttattcagt

19

<210> 72
<211> 19
<212> DNA
<213> Homo sapiens

<400> 72
cgctcacagt tattcagtg

19

<210> 73
<211> 20
<212> DNA
<213> Homo sapiens

<400> 73
aatcccagca catttagtat

20

<210> 74
<211> 20
<212> DNA
<213> Homo sapiens

<400> 74
actatagttt gcaaaatccc

20

<210> 75
<211> 18
<212> DNA
<213> Homo sapiens

<400> 75
tgagagctgg gattagaa

18

<210> 76
<211> 19
<212> DNA
<213> Homo sapiens

<400> 76
gagagctggg attagaagt

19

<210> 77
<211> 19
<212> DNA
<213> Homo sapiens

<400> 77
agagctggga ttagaagtc

19

<210> 78
<211> 20
<212> DNA
<213> Homo sapiens

<400> 78
aatcccagca catttagtat

20

<210> 79
<211> 20
<212> DNA
<213> Homo sapiens

<400> 79
cccacccatg tgtaccata

20

<210> 80
<211> 9734
<212> DNA

<213> Homo sapiens

<400> 80

tgtaacacaa aattaaata agtagaatta gttttcagta tttcctatat ttggaaaaca 60
atattttatat tcatttttgtt tcttttagtt ttatttttgg cagaactgta agcaccttca 120
ttttcttttt cttccaaagg aggagtttaa ctaccctctg gacaatgtcc atctcttggg 180
atacagcctt ggagcccatg ctgctggcat tgcaggaagt ctgaccaata agaaagtcaa 240
cagaattact ggtaagaaag caatttcgtt ggtccttca taagaggtga aaagactgtc 300
attctgagag agaatacagaa caaattttgt taaataccca catgtgtggt gttcttccc 360
gagacatgac cagcacttga ttatctcatt gtagggctct ttattaggga taagaaaaaa 420
cacagacgtc ctactggct tactatccac tggcaatagc acagaaataa agcataatta 480
cacacaatgc ctgcagattt ctctgggaag cctgtttcct cccactctca gctctgtgtt 540
ttagtagtgt aaatgcacat cagtactagg agaaaagaag aaggaccaat tccagaggcc 600
acttcgaaag aagaccgtca tctaggcaaa ggtgtggcat acacacagag agaaagaacc 660
caccactgtt tatacatctt ctgcacatat tcagaaataa tctacaaaag gaaatccagc 720
catcctgagt ggaaattgct gcataaggct agtttaagag actcaaattc attttagaag 780
gagccaagcc tctttttatg tctctctaag taaagatacc atgactgtag aataggagct 840
aataagaatc taaatagctg ccagtgcatt caaatgatga gcagtgcacat gcgaatgtca 900
tacgaatgga aatttaca aa tctgtgttcc tgtttttt ccttttaagg cctcgatcca 960
gctggaccta actttgagta tgcagaagcc cagagtcgtc tttctcctga tgatgcagat 1020
ttttagtagc tcttacacac attcaccaga ggggtcccctg gtcgaagcat tggaaatccag 1080
aaaccagttg ggcattgtga catttaccgc aatggaggta cttttcagcc aggatgtaac 1140
attggagaag ctatccgcgt gattgcagag agaggacttg gaggtaaata ttatttagaa 1200
gcgaattaaa tgtgactctt atccttaacc cttattgacc caatgtccta ctcagtagct 1260
tcaaagtatg tagttttcat atacacattt ggccaaaatta tgtttctgaa gaattctgca 1320
atgttcagca tgaccacctt agagccaggc agacagccat tttatctttt atttactata 1380
ctgtaggcta cactgagcag tgcacttaca gtagcaagag aaaaagggtg gatttttagac 1440
aggaagactc cactgacctc aataatggca tcataaaatg ctatctggcc acatgttgc 1500
ataccttgaa tgtagctgca aagccaatgg aaagatttta gatgttactg gaacagaaga 1560
tgtaaatag cataaatctt ccaaaatggt cagaacataa tgtagctta atgttttact 1620
ttaataatgt tagcttgtgt taaattttatg attttgttt gttgttttt tgagatagag 1680
tcttattcta ttgcccagc tggggtgcag tcacacaatc acagggactt gcaatgttgc 1740
ccaggctggt ctcaaactcc tggcctcaag tgatcctcct gcctcagcct cccaaagttc 1800
tgggattgca gctgtgagcc accacgccc gtttacgatt tatttttaag agccccttgc 1860
atactttata gacattggga cctacctagg atattctcgt tatttttgtg cacgtaatag 1920
aacttagagc atattgttac tattttcgat tgtcctaaaa acttacaagg aattcattct 1980
tatggcattg ctgattattt ctatgttcat ttgatataaa agagtgttag taggggcaga 2040
accctcaatt gtacataata tcaatgataa aatacaattc atttaacaat taccctctta 2100
agatgtgggt tctagaaata caaattgtcc ctaacttaca gttttccaac tttacaattg 2160
ggctgtaaca ccattttaag ttgagaagca cgtgatgggt tgacttaaaa ctttttgaca 2220
ttatgatggg ttttgggggt attaagtgca ttttgactta cagtattttt gacttatgaa 2280
gaatttattg taaggcaagg ggcaggata tgtttctaga agcacctaga agtggttagac 2340
actttcaatg taagagaagg atgagataaa caaggaaatc acacctccac cttggagggt 2400
tattacagct tcataaacat actcataaat ataagaagca caaaagtcaa aaattccctg 2460
tgaacttgca actttcactc tcttgaagggt ggggtgggccc ctaccaccaa gaatatctcc 2520
tgaaataggg cctacaatca taaatgcaca ggactatct cttgggtgat tctactctaa 2580
caccacatct cacctatttt agacatgcca aatgaaacac tctttgtgaa tttctgccga 2640
gatacaatct tgggtgtctt tttttaccca gatgtggacc agctagtga gtgctcccac 2700
gagcgtcca ttcactctct catcgactct ctgttgaatg aagaaaatcc aagtaaggcc 2760
tacagggtgca gttccaagga agcctttgag aaagggtct gcttgagttg tagaaagaac 2820
cgctgcaaca atctgggcta tgagatcaat aaagtcagag ccaaaagaag cagcaaaatg 2880
tacctgaaga ctggttctca gatgccctac aaaggtaggc tggagactgt tgtaataaag 2940
gaaaccaagg agtcttatt catcatgctc actgcacac atgtactgat tctgtccatt 3000
ggaacagaga tgatgactgg tgttactaaa cctgagccc tgggtgtttc gttgataggg 3060
ggttgcatgt atccatttgt ctgaggcttc taattcccat tgtcagcaag gtcccagtc 3120

```

tcagtgtggg atttgcagcc ttgctcgctg cctccccctg taaatgtggc cattagcatg 3180
ggctaggcta tcagcacaga gctcagagct catttggaac catccacctc gggtaacaaa 3240
actataaccc ttgtgccaaa tccagcctac ttcttgcttt tgtaaatagt ttttttaaaa 3300
cttttaagtt caggggtacg tatgtaggtt tgctaaaaag gtaaacttgt gacatgggag 3360
tttgttgtcc agaataattcc atcaccaggg tattaagctt agtaccatt agttactttt 3420
cctgaagctc tccctcctcc caccctctgg gagggcccag tgtctgttgt tccctctat 3480
gtgctcatgc aaagttttat taggacacag ccacacacat tcattaccat attgtcaaa 3540
gctggtttca tgccaccata acagagttga tagcccacag agcctaaaat atttactccc 3600
tggcccttta cagaatgttc acaacttaca taaaggcaag gaccatctgt cttattttatt 3660
tattttatta atttgagatg aagtctagct ttctcctagg ctggaggaga ggggcatgat 3720
cttggtcac cacaacctc gcctcccggt tctcaatgat tccctgcct cagcctccgg 3780
agtagctggg ataacaggga tgccacatca tgccagctc atttttgtat ttttagtaga 3840
gaggggggtt caccgtgttg accaggctgg tctcgaactg ctgacctcag gtgatctgcc 3900
ctccttggcc tcatctgtct ttttaaagtc aactattcct ggaaggcaag aatatctcac 3960
accttctaag atactgcat tttgccagga gtttgtttca cacttgaatt tcaagcttgg 4020
cctctgttt agaggcagac cttaaaggaat ggtcggaaaa tgagagagga ggtcttcgga 4080
taaatccggt gagagggacc aacttcagga aggggtggctt ttgtggaatc cagatggaaa 4140
cctgagggaa gggatgatat taaagaacag tggcccagg taaaacatat ggcaccatg 4200
tgtaagggtg ttcttagaat ctgtagaggt gtctttcgtg gtatagaggt tgaggcacct 4260
gtgcttcaag gaaaccttaa ctcttcaaaa tcaggcaatg cgtatgaggt aaagagagga 4320
ctgtgggacc ataactttga agacacagac aggccttact catccctgcc tcctgcacca 4380
gtgggttcaa ggtctgtca gtgtccccta ggggcacctc accactccca gcttcttcag 4440
ctctggcctg tctgtctgcc tgcaagggtt ttgcttaatt ctcaattcaa tgtctcttca 4500
tcttttagta gctgtggggt tttgttgtt ttcttctgtt ttgtcttagt atctgactac 4560
tttttaatta taaaaagaga tgtatctaaa caaaatagag attgttatca gaagttcaca 4620
acatttatta aaaatttttt cacctggaca agagtctaaa gcagcataaa aatatggtct 4680
gctatattct aaaccatcag tcttaagaga tctgtgtctc agcttaagag aaaatacatt 4740
taatagacag taacacaaat aagaaaaaaa tctgaccaag gatagtggga tatagaagaa 4800
aaaacattcc aagaattatt ttattttatt atttatttat ttattttatt attttattat 4860
ttttgagaca cggctctcgt cagttaccca ggtcggagtg cagcggcgca atcttaactc 4920
actgcaacct ctgctttccg gttcaagcga ttctcctgcc tcagcctcct gagtaactgg 4980
gattacaggc acccgccacc acgcccact aatttctgta tttttcttag tagaaacagg 5040
gtttcaccat gttggccaag ctagtctcaa actcctgacc tcaggtgatt caccaccaa 5100
ggcctcccaa agtgctggga ttacaggcat gagccaccat gcctggcctc caaaaactct 5160
tttttccctc atcatcatgg ttctatttta gtcctgctgc ctttctttt aacctctccc 5220
caggcccat ttgctcagggt ttttggtaga gaccagagga ggggcaggga ggagatatag 5280
aagttcaact acctgcttcc agaggctgtc cctagtatag aatactttag gggctggctt 5340
tacaaggcag tcttgtggc ctactgatg gctcaatgaa ataagttctt ttttaaaaaa 5400
aattttattt atttccatag gttattggg gaacagggtg tgtttggtta catgagtaag 5460
ttcttttagta gtgatttggt agattttggt gtgcccatta cggaatggaa aaatcaacga 5520
aataagttct atgatgcacc tactagacac ctaatctgca ctatggttg ggggaattaa 5580
gagcatgggc atgatcctgt gaccggaagc ccgcttacag tcagggtgga ggacagacct 5640
actcatgaaa caaacacagt gacatatagt gacacagaag tcatggagaa agcatcatga 5760
tccagatgct aaggcacaag atggccaagg atggcgaggt tcatggagaa agcatcatga 5760
gtgttttggc cttctgattt gatctcccta gcaccttca aagatggcta cttcctaagt 5820
ctgcttggca attcagacac atttgggttt tctctatgca tataaccaca cttttctgaa 5880
agggagtga attcaagggt tgcattttct aggtatgaac actgtgcatg atgaagtctt 5940
tccaagccac accagtgggt ccatgtgtgt gcacttccgg tttgagtgt agtgagatac 6000
ttctgtgggt ctgaattgcc tgactatttg gggttgtgat attttcataa agattgatca 6060
acatgttcca atttctccc caacagtctt ccattacca gtaaagattc attttctgg 6120
gactgagagt gaaaccata ccaatcaggc ctttgagatt tctctgtatg gcaccgtggc 6180
cgagagtgag aacatcccat tcaactctgt agtagcacag gggggcggtc atcatggcac 6240
cagtccttcc cctgccataa cccttggctt gagcagcaga agcagagagc gatgcctaga 6300
aaacaagtct ttagttaaaa aaatcagaat ttcaaaaatt aggtctttcc tctatttgat 6360
attgagaaaa aaatgcttca aattggccat tttattttca cttactagtt atattttttt 6420

```

atttatcatc	ttatatctgt	ttatctcttt	tataaagctg	ctgttaaaca	atataattaa	6480
actatctcaa	aaggtttgac	attaaagaaa	atgagcaatg	gtaacaggaa	accactctat	6540
agatgtacat	ataatatgta	cagaaaatat	aagtagtaag	aagtccatga	caaagtgtta	6600
gctctttttt	tttttttttt	tttttttttt	tttgagatgg	agtctctctc	ctattgcccc	6660
ggctggagtg	cagtgattcg	atctcagctc	actgcaacct	ctacctcccg	agttcaaaca	6720
attctctctgt	ctcagcctcc	cgagtagctg	gggctgcagg	tgccccaccac	catgccagc	6780
taatttttgt	atttttagta	gcgacagggg	ctcaccatgt	tggccaagct	ggctctgaat	6840
tcttgatctc	aggtgatcca	cccgcctcgg	cctcccaaag	tgctgggatt	acaggtgtga	6900
gccaccatgc	ccagcctacc	ctttactact	aatcaaagaa	ataaaaagtaa	ggcaacttga	6960
tactttttaca	attactagat	gaacaaatct	ttaaaaatag	ccagtgcaga	caaggtgggtg	7020
aagcagaaca	tgcgaacctt	ccatgcatca	ttcacggcta	gaaccctcca	gggtgcggaag	7080
gtagtatttt	aataactttc	catagctaca	aaatattatt	acatagaagg	gagtgatttt	7140
tttctaatat	ttatcctaaa	gaaatagtca	acaaacattt	ttaaaaaaca	tcaattacag	7200
tcgtacctat	actagcataa	attagaaacc	cagtatccaa	cattgaggca	gtgggttaa	7260
gaatcgtggg	ttatcaagtc	attaaaaatca	atctagcctt	taaaaaactat	aattgtagga	7320
aacccaggaa	aacatagtaa	aaaatggaat	ataaaaatcta	aagagaataa	agaatagaga	7380
atcgtatgtg	tgctatgatt	gtagctaaat	aatgttcaag	tatcaacaca	aattgaaaaag	7440
gaatacatga	aaatgaaaat	tatatttctg	aatgattgac	ttcaggattt	tcttttagaa	7500
ttgtattaaa	tagttcatgt	cattaggata	aatgctggaa	tgtggatata	atttaaaata	7560
tactaaatgc	catcgacctt	catttttaggt	tctttgttgg	acatttttgt	gcatttttaa	7620
aatatccctt	aaataataaa	gctattttata	tttgagagg	agaaaaaaa	gtggggggca	7680
gggagagctg	atctctataa	ctaaccaaat	ttattgcttt	tttgtttagg	cctgaagttt	7740
ccacaaaata	gacatactcc	ttcctaattt	acacagaggt	agatattgga	gaactactca	7800
tgttgaagct	caaagtgaag	agtgattcat	acttttagctg	gtcagactgg	tgagcagctc	7860
ccggcttcgc	cattcagaag	atcagagtaa	aagcaggaga	gactcagaaa	aagtaattaa	7920
atgtattttt	cttccctcac	tttagacccc	cacctgatgt	caggacctag	gggctgtatt	7980
tcaggggcct	tcacaattca	gggagagctt	taggaaacct	tgtatttatt	actgtatgat	8040
gtagattttc	tttaggagtc	ttcttttatt	ttcttatttt	tgggggggcgg	gggggggaagt	8100
gacagtattt	ttgtatttca	tgtaaggaaa	acataagccc	tgaatcgctc	acagttattc	8160
agtgagagct	gggattagaa	gtcaggaatc	tcagcttctc	atttggcact	gtttcttgta	8220
agtacaaaat	agtttagggaa	caaacctccg	agatgctacc	tggataatca	aagattcaaa	8280
ccaacctctt	caagaagggt	gagattccaa	gataatctca	acctgtctcc	gcagccccac	8340
ccatgtgtac	ccataaaaatg	aattacacag	agatcgctat	aggattttaa	gctttttatc	8400
taaatgtgct	gggattttgc	aaactatagt	gtgctgttat	tgttaattta	aaaaaactct	8460
aagttaggat	tgacaaaatta	tttctcttta	gtcatttgct	tgtatcacca	aagaagcaaa	8520
caaacaaaaca	aaaaaaaaaaa	gaaaaagatc	ttgggggatgg	aaatgttata	aagaatcttt	8580
tttacactag	caatgtctag	ctgaaggcag	atgcccta	tccttaatgc	agatgctaag	8640
agatggcaga	gttgatcttt	tatcatctct	tgggtgaaagc	ccagtaacat	aagactgctc	8700
taggctgtct	gcatgcctgt	ctatctaaat	taactagctt	ggttgctgaa	caccgggtta	8760
ggctctcaaa	ttaccctctg	attctgatgt	ggcctgagtg	tgacagttaa	ttattgggaa	8820
tatcaaaaaca	attaccagc	atgatcatgt	attattttaa	cagtcctgac	agaactgtac	8880
ctttgtgaac	agtgtctttg	attgttctac	atggcatatt	cacatccatt	ttcttccaca	8940
gggtgatctt	ctgttctagg	gagaaagtgt	ctcatttgca	gaaaggaaaag	gcacctgcgg	9000
tatttgtgaa	atgccatgac	aagtctctga	ataagaagtc	aggctgggtga	gcattctggg	9060
ctaaagctga	ctgggcatcc	tgagcttgca	ccctaaggga	ggcagcttca	tgcattcctc	9120
ttcaccccat	caccagcagc	ttgccctgac	tcattgtgatc	aaagcattca	atcagctctt	9180
cttagtcctt	ctgcatatgt	atcaaatggg	tctgttgctt	tatgcaatac	ttcctctttt	9240
tttctttctc	ctcttgtttc	tcccagccc	gaccttcaac	ccaggcacac	atttttaggtt	9300
ttatttttact	ccttgaacta	cccctgaatc	ttcacttctc	cttttttctc	tactgctctt	9360
ctgctgactt	tgcagatgcc	atctgcagag	catgtaacac	aagtttagta	gttgccgttc	9420
tggctgtggg	tgcagctctt	cccaggatgt	attcagggaa	gtaaaaagat	ctcactgcac	9480
cacctgcagc	cacatagttc	ttgattctcc	aagtgccagc	atactccggg	acacacagcc	9540
aacagggctg	ccccaaagc	ccatctcaaa	acctcaaaag	ctgccaagca	aacagaatga	9600
gagttatagg	aaactgttct	ctcttctatc	tccaaacaac	tctgtgcctc	tttcttacct	9660
gaccttttag	gctaattccat	gtggcagctg	ttagctgcat	ctttccagag	cgtcagtact	9720

<210> 81
 <211> 3867
 <212> DNA
 <213> Homo sapiens

<400> 81
 gaattcaagg tctgcatttt ctaggtatga acactgtgca tgatgaagtc tttccaagcc 60
 acaccagtgg ttccatgtgt gtgcacttcc ggtttgagtg ctagtgagat acttctgtgg 120
 ttctgaattg cctgactatt tggggttgtg atattttcat aaagattgat caacatgttc 180
 gaatttcctc cccaacagtc ttccattacc aagtaaagat tcatttttct gggactgaga 240
 gtgaaaccca taccaatcag gcctttgaga tttctctgta tggcaccgtg gccgagagtg 300
 agaacatccc attcactctg tgagtagcac agggggggcgg tcatcatggc accagtcctc 360
 ctctgcatc aacccttggc ctgagcagca gaagcagaga gcgatgccta gaaaacaagt 420
 ctttagttaa aaaaatcaga atttcaaaat tgaggctctt cctctatttg atattgagaa 480
 aaaaatgctt caaattggcc attttatttt cacttactag ttatatattt ttatttatca 540
 tcttatatct gtttatttct ttataaaagc tgctgttaaa caatataatt aaaaggtttg 600
 acattaaaga aaatgagcaa tggtaacagg aaaccactct atagatgtac atataatatg 660
 tacagaaaaa ataagtagta agaagtccat gacaaaagtg tagctctttt tttttttttt 720
 tttttttttt tttttgagat ggagtctctc tctattgccc aggctggagt gcagtgatcc 780
 gatctcagct cactgcaacc tctacctccc gagttcaaac aattcttctg tctcagcctc 840
 ccgagtagct ggggctgcag gtgcccacca ccatgcccag ctaatttttg tatttttagt 900
 agcgacaggg tctcaccatg ttggccaagc tggctctgaa ttctctgatc caggtgatcc 960
 accgcctcgc gcctcccaaa gtgctgggat tacagggtgt agccaccatg cccagcctac 1020
 cctttactac taatcaaaga aataaaaagta aggcaacttg atacttttac aattactaga 1080
 tgaacaaatc tttaaaaata gccagtgcag acaagggtgt gaagcagaac atgcgaacct 1140
 accatgcac attcacggct agaaccctcc aggtgcggaa ggtagtattt taataacttt 1200
 ccatagctac aaaaatattat tacatagaag ggagtgattt ttttctaata tttatcctaa 1260
 agaaatagtc aacaaacatt tttaaaaaca cttgaggca gtgggtaaat gaatcgtggg ttatcaagtc 1380
 attagaaacc cagtatccaa cattgaggca aattgtagga aaccaggaa aacatagtaa 1440
 attaaaatca atctagcctt taaaaactat aattgtagga atcgtatgtg tgctatgatt 1500
 aaaatggaat ataaaatctg aagagaataa agaatagaga atcgtatgtg aaatgaaaat 1560
 gttagctaaat aatgttcaag tatcaacaca aattgaaaag gaatacatga aaatgaaaat 1620
 tatatttctg aatgattgac ttcaggattt tcttttagaa ttgtattaaa tagttcatgt 1680
 cattaggata aatgctggaa tgtggatata atttaaaata tactaaatgc catcgacctt 1740
 catttttagt tctttgttgg acatttttgt gcatttttaa aatatcccct aaataataaa 1800
 gctattttata tttggagagg agaaaaaaa gtgggggggca gggagagctg atctctataa 1860
 ctaaccaaatt ttattgcttt tttgtttagg cctgaagttt ccacaaataa gacctactcc 1920
 ttccctaattt acacagaggt agatattgga gaactactca tgttgaagct caaatggaag 1980
 agtgattcat acttttagctg gtcagactgg tggagcagtc ccggtctcgc cattcagaag 2040
 atcagagtaa aagcaggaga gactcagaaa aagtaattaa atgtattttt cttccttcac 2100
 tttagacccc cacctgatgt caggacctag gggctgtatt tcaggggcct tcacaattca 2160
 gggagagctt taggaaacct tgtatttatt actgtatgat gtagattttc tttaggagtc 2220
 ttcttttatt ttcttatttt tggggggcgg ggggggaagt gacagtattt ttgtatttca 2280
 tgtaaggaaa acataagccc tgaatcgctc acagtatttc agtgagagct gggattagaa 2340
 gtcaggaatc tcagcttctc atttggcact gtttcttgta agtacaaaat agttagggaa 2400
 caaacctccg agatgctacc tggataatca aagattcaaa ccaacctctt ccagaagggt 2460
 gagattccaa gataatctca acctgtctcc gcagccccac ccatgtgtac ccataaaatg 2520
 aattacacag agatcgctat aggattttaa gctttttata taaatgtgct gggattttgc 2580
 aaactatagt gtgctgttat tgttaattta aaaaaactct aagttaggat tgacaaaatta 2640
 tttctcttta gtcatttgct tgtatcaca aagaagcaaa caaacaaca aaaaaaaaaa 2700
 gaaaaagatc ttggggatgg aaatgttata aagaatcttt tttacactag caatgtctag


```

ctgaaggcag atgccctaatt tccctaattgc agatgctaag agatggcaga gttgatcttt 2760
tatcatctct tggtgaaagc ccagtaacat aagactgctc taggctgtct gcatgcctgt 2820
ctatctaaat taactagctt ggttgctgaa caccagggtta ggctctcaaa ttaccctctg 2880
attctgatgt ggcttgagtg tgacagttaa ttattgggaa tatcaaaaca attaccagc 2940
atgatcatgt attattttaa cagtcctgac agaactgtac ctttgtgaac agtgcttttg 3000
attgttctac atggcatatt cacatccatt ttcttccaca gggatgatctt ctgttctagg 3060
gagaaagtgt ctcatattgca gaaaggaaag gcacctgcgg tatttgtgaa atgccatgac 3120
aagtctctga ataagaagtc aggtcgtgga gcattctggg cttaaagctga ctgggcatcc 3180
tgagcttgca ccctaaggga ggcagcttca tgcattcctc ttcaccccat caccagcagc 3240
ttgccctgac tcatgtgatc aaagcattca atcagtcttt cttagtctct ctgcatatgt 3300
atcaaattggg tctgttgctt tatgcaatac ttctctttt tttctttctc ctcttgtttc 3360
tcccagcccg gaccttcaac ccaggcacac atttttaggtt ttattttact ccttgaacta 3420
ccctgaatc ttcacttctc cttttttctc tactgcgtct ctgctgactt tgcagatgcc 3480
atctgcagag catgtaacac aagtttagta gttgccgttc tggctgtggg tgcagctctt 3540
cccaggatgt attcaggga gtaaaaagat ctactgcat cacctgcagc cacatagtct 3600
ttgattctcc aagtgccagc atactccggg acacacagcc aacagggtg cccaagcac 3660
ccattctcaa aaccctcaaa gctgccaaagc aaacagaatg agagttatag gaaactgttc 3720
tctcttctat ctccaaacaa ctctgtgcct ctttctacc tgacctttag ggctaatacca 3780
tgtggcagct gttagctgca tctttccaga gcgtcagtac tgagaggaca ctaagcatgt 3840
gaccttcaat actcctgttc tgaattc 3867

```

<210> 82
 <211> 24
 <212> DNA
 <213> Homo sapiens

<400> 82
 ctggacaaga gtctaaagca gcat 24

<210> 83
 <211> 20
 <212> DNA
 <213> Homo sapiens

<400> 83
 gaatcgcttg aaccggaaaag 20

<210> 84
 <211> 24
 <212> DNA
 <213> Homo sapiens

<400> 84
 accatcagtc ttaagagatc tgtg 24

<210> 85
 <211> 24
 <212> DNA
 <213> Homo sapiens

<400> 85
 cacagatctc ttaagactga tggc 24

<210> 86
 <211> 20

<212> DNA
<213> Homo sapiens

<400> 86 20
tttttcacct ggacaagagt

<210> 87
<211> 20
<212> DNA
<213> Homo sapiens

<400> 87 20
gggtaactga gcgagaccgt

<210> 88
<211> 20
<212> DNA
<213> Homo sapiens

<400> 88 20
ttcacctgga caagagtcta

<210> 89
<211> 15
<212> DNA
<213> Homo sapiens

<400> 89 15
gcttgaaccg gaaag

<210> 90
<211> 20
<212> DNA
<213> Homo sapiens

<400> 90 20
tcacctggac aagagtctaa

<210> 91
<211> 17
<212> DNA
<213> Homo sapiens

<400> 91 17
ctccagcctg ggtaact

<210> 92
<211> 20
<212> DNA
<213> Homo sapiens

<400> 92 20
acaagagtct aaagcagcat

<210> 93

<211> 668
 <212> DNA
 <213> Homo sapiens

<400> 93
 tcttttagta gctgtggggt tttgttggtg ttcttctggt tttgcttagt atctgactac 60
 tttttaatta taaaaagaga tgtatctaaa caaaatagag attgttatca gaagttcaca 120
 acatttatta aaaatttttt cacctggaca agagtctaaa gcagcataaa aatatggtct 180
 gctatattct aaaccatcag tcttaagaga tctgtgtctc agcttaagag aaaatacatt 240
 taatagacag taacacaaat aagaaaaaaa tctgaccaag gatagtggga tatagaagaa 300
 aaaacattcc aagaattatt ttattttatt atttatttat ttattttatt atttatttat 360
 ttattttatt ttgagacacg gtctcgctca gttaccagg ctggagtgcg gcggcgcaat 420
 cttaactcac tgcaacctct gctttccggt tcaagcgatt ctctgcctc agcctcctga 480
 gtaactggga ttacaggcac ccgccaccac gcccaactaa tttctgtatt tttcttagta 540
 gaaacagggg ttaccatgt tggccaagct agtctcaaac tctgacctc aggtgattca 600
 cccaccaagg cctcccaaag tgctgggatt acaggcatga gccaccatgc ctggcctcca 660
 aaaactct 668

<210> 94
 <211> 3240
 <212> DNA
 <213> Homo sapiens

<400> 94
 gaattctctc taaaaataaa atgatgtatg atttgttggt ggcatcccct ttattaattc 60
 attaaatttc tggatttggt ttgtgacca ggggtgcatta acttaaaaga ttcactaaag 120
 cagcacatag cactgggaac tctggctccg aaaaactttg ttatatatat caaggatggt 180
 ctggctttac attttattta ttagctgtaa atacatgtgt ggatgtgtaa atggagcttg 240
 tacatattgg aaaggtcatt gtggctatct gcatttataa atgtgtggtg ctaactgtat 300
 gtgtctttat cagtgtgggt ctccagagc caactcactc ttatgaaatg ggctttaaca 360
 aaacaagaaa gaaacgtact taactgtgtg aagaaatgga atcagctttt aataaaattg 420
 acaacatttt attaccacac taagtcatca ttttgatca tttttaaagt aaatttattc 480
 ttaggtcaga ttcactcagc atattttgac taagtaacca ctgtacttag taaaccgaag 540
 agcttctgag aattatagtg taccgtatag atatttttaa catttatatt tgtataaagc 600
 taaagaaagc cttacatatc ctttaaaactg actatagaag aaaatgatac agaattttgc 660
 ctgcataaag tacacaggac tattcttgcc tacaatatgc tttttcacaa gcaaaatggt 720
 agactaatat aaggcatctt tggccatttt atagtgtaca tcatctctat ttctgaggcc 780
 tcattgttag ctgtaacgca agtagcatt gtgcaataaa atgaactatt tgggatggga 840
 gggtagattt tttagaactt tgctttgggt tgccttgata ataatagca tatagtccat 900
 ttatgcagct aagtagggat tgcttcttag tacagtcagg aagaatttag cccagaaaac 960
 aattatttca atggccactg acccaaactt ccaggctgaa gagcaatggc gtgatcatgg 1020
 ctactgcac ctccacctcc caggctcaag tgattctcct gcctcagcct cccaagtaga 1080
 tggtagtaca agcacacgcc actgcacca gctaattttt gtattttttg tagagatggg 1140
 ggtttcacca tgttgcccag gctgggtctta aattcctggc ctcaagtgtc tgccccctt 1200
 ggctcccaa agtgctggaa ttacaggcat gagccaccat gtccagcctt gacccaaact 1260
 tttattgtca gttagctatt gggggcttct ggagtttggg tctcccctga caggaggggg 1320
 ctccccagtt cacacttggc cactgcccac caattcctgt tgatgatgat aacaagatag 1380
 acaattgcaa atgttgctga ggatgtggag aagtgtgaac ctgtgtgaag ggctgatggg 1440
 aatgtaaaat ggcacagcca ctatggagaa caatttggta gtatttccaa agttaagcat 1500
 agagtttaac ccatatgacc cagcaattcc actcctagat atatacccaa gagaaatgaa 1560
 aacacagatc cacaaagatt tgcacacaca ggttcatagc agcattaatc agattagtcc 1620
 caaagtggac aacccaaatg tccatgaact tgtgaaagag ataagcaaaa tgtgacaaat 1680
 tcacataata aaatattatt cagaagtaaa aagaacaagc agcagatata tgatacaaca 1740
 cgatgcgcct tgaaaacggt tagccatatg aaagaacca gatgcaaaat ggaaccatgg 1800
 cttaggggag gagaacggca caatggtgta aaagttgcag agaggaacaa aaaggctacc 1860

tgccctcgctc	ccaggccaag	taacacagga	ggaaagaaaa	tatccacata	tgcgagggct	1920
aaaggaaaga	ggtgttctca	agctgaagca	ggaggtggga	ctcaactctg	gaggtgggcc	1980
tcacacactg	taccaaattg	aggactagct	aaaacagggg	tgggggtgaa	agcacctttt	2040
cgtaagacat	gcccaccatt	gtcccgttct	cctcccttaa	gcccttgtct	tgctcatgtc	2100
agcaagctta	ttgccatcta	ttcttcttag	ttacagacat	ctgtggagct	ctgagttttt	2160
tgccaatca	ttattttaga	acctgggtca	ctctctctcc	cttctacact	agttctgtca	2220
ttattattac	tgatttccagt	acctctgagg	tgatagattt	tattttccaa	tggcagccac	2280
aacactacct	cccattctat	atgttcccc	gcaatgttgc	cttgacatcc	ctattaagag	2340
ttggaatcta	gtcaccctgc	ttttctagtc	tccccactcc	tttgaacttg	tgtggggcct	2400
aagattgctt	ctactagtag	aatagaacta	aaatgaccct	ggaccagtgt	gggggtgcagc	2460
ccttaactgg	cctggcagct	tctgcttttg	gttccttggg	gcactcactc	ttgggaaact	2520
tcccttttga	actcagcatt	catgatgcgg	aagttgaagc	cacatgaaaa	gagcatatgg	2580
tggttctctc	agctcccagc	caacaaccag	tctcgactgt	cagccatgtg	agtgaggcat	2640
cttggacctc	cggccagttg	agtgttcaga	agactgcagc	tcgagctggc	atctggatgc	2700
aaccacatga	gagacgctct	gcccagccaa	gcccagccaa	ctcacagtac	tatgagagat	2760
actaataact	tggtgtgtgt	gttgtgtgtg	ttgtttttat	tattaaactt	taagttttag	2820
catacacgtg	cacaacgtgc	aggttagtta	catatgtata	cctgggcat	gttggtgtgc	2880
tgcaccagct	aactcgtcat	ttaacattag	gtatatctcc	aaatgctatc	cctccccct	2940
ccctaagttt	ttaggagttt	gctttgcaac	gatagatagt	tgaaacatct	ggatgatgca	3000
tccagtattc	tggtcttctc	ctgcctttac	ctcctctctc	ccatggcctt	gtcttctaaa	3060
tctaccttta	catagaaaca	ttcagtcacg	tgctatacta	tatcatgcca	ttactaataa	3120
ctcataaact	caatttcaac	ttctcccttc	tttgactacc	acatgctatc	tttttacttt	3180
aatcagtcta	gtgctctcag	ttcaacagct	cctcaactgc	cccaggacct	ccaatacatt	3240

<210> 95
 <211> 22
 <212> DNA
 <213> Homo sapiens

<400> 95
 atgaaaagag catatggtgg tt 22

<210> 96
 <211> 25
 <212> DNA
 <213> Homo sapiens

<400> 96
 tggcccaggt atacatatgt aacta 25

<210> 97
 <211> 25
 <212> DNA
 <213> Homo sapiens

<400> 97
 ggcccaggta tacatatgta actaa 25

<210> 98
 <211> 22
 <212> DNA
 <213> Homo sapiens

<400> 98

0989879.070301

tgaaaagagc atatggtggt tc

22

<210> 99
<211> 21
<212> DNA
<213> Homo sapiens

<400> 99
gaaaagagca tatggtggtt c

21

<210> 100
<211> 25
<212> DNA
<213> Homo sapiens

<400> 100
gcccaggtat acatatgtaa ctaac

25

<210> 101
<211> 20
<212> DNA
<213> Homo sapiens

<400> 101
aaaagagcat atggtggttc

20

<210> 102
<211> 25
<212> DNA
<213> Homo sapiens

<400> 102
ggttctctca gctcccagcc aacaa

25

<210> 103
<211> 23
<212> DNA
<213> Homo sapiens

<400> 103
agcacaccaa catggcccag gta

23

<210> 104
<211> 25
<212> DNA
<213> Homo sapiens

<400> 104
ctcagctccc agccaacaac cagtc

25

<210> 105
<211> 24
<212> DNA
<213> Homo sapiens

<400> 105
cagcacacca acatggccca ggta

24

<210> 106
<211> 25
<212> DNA
<213> Homo sapiens

<400> 106
agctcccagc caacaaccag tctcg

25

<210> 107
<211> 16
<212> DNA
<213> Homo sapiens

<400> 107
actccgggaa tgaggt

16

<210> 108
<211> 21
<212> DNA
<213> Homo sapiens

<400> 108
ccagaaagaa gagattttgt c

21

<210> 109
<211> 24
<212> DNA
<213> Homo sapiens

<400> 109
ctgctttaga ctcttgcca ggtg

24

<210> 110
<211> 24
<212> DNA
<213> Homo sapiens

<400> 110
gggttcaagg ctctgtcagt gtcc

24